**Worksheet 4.2B- Used Cars NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Open the group USEDCAR to get the lists USEDA and USEDB. USEDA is a list of the years old a sample of used Toyota Corollas. (For example, if it is now 2012 and we own a Toyota Corolla, it would be listed as 12) USEDB is the price listed in the local paper for that used car.

1. Create the scatterplot. Describe the association.
2. Calculate the LSRL (use your calculator). Then add it to your plot.
3. What is the correlation?
4. What is the slope? Interpret in the context of the problem.
5. If you want to sell a 7-year-old Corolla, what price seems appropriate? (show work)
6. What is the residual for a car that is 3 years old?
7. You have the chance to buy one of two cars. They are about the same age and appear to be in equally good condition. Would you rather buy the one with a positive residual or a negative residual? Briefly explain.
8. Would this regression model be useful in establishing a fair price for a 20-year-old car? Why or why not?
9. What is R2? What does this mean in the context of the problem?
10. What percent of the variability in price is **not** being explained by the linear model?
11. What other factors may be contributing to the change in price?
12. Create and sketch the residual plot
13. Does the linear model seem an appropriate one?